

H.A

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/709,197	LIN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Linh V. Nguyen	2819	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/26/06.
2. ☒ The allowed claim(s) is/are 10 - 12, and 14 - 30.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>12/22/05</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                               | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

### **DETAILED ACTION**

1. This office action is in response to communication filed on 1/26/06. Claims 10, 14, 16, 17, and 18 have been amended. Claims 1 – 9, and 13 have been canceled. Claims 25 – 30 have been added. Claims 10 – 12, and 14 – 30 are pending on this application.

### ***Allowable Subject Matter***

2. Claims 10 – 12, and 14 – 30 are allowed.

The following is an examiner's statement of reasons for allowance:

With respect to claim 10, in addition to other elements in the claim, the prior art considered individual or in combination, fails to fairly show or suggest an a variable amplifier comprising: a proportional to thermal voltage amplifier comprising: a transresistance unit having a first transistor for receiving the reference voltage; a second transistor for generating the first output voltage; a second current mirror coupled to the first transistor and the second transistor; and a first bias current source coupled the first transistor and the second transistor for providing a first bias current.

With respect to claim 16, in addition to other elements in the claim, the prior art considered individual or in combination, fails to fairly show or suggest an a proportional to thermal voltage amplifier comprising: a first current mirror coupled between the transconductance unit and the transresistance unit for generating a second current according to the first current, and the transresistance unit comprises a second current mirror coupled to transconductance unit through the first current mirror.

With respect to claim 21, in addition to other elements in the claim, the prior art considered individual or in combination, fails to fairly show or suggest an a proportional to thermal voltage amplifier comprising: a first transistor for receiving the reference voltage; a second transistor having first end coupled to the first current mirror, wherein the second transistor is for generating the first output voltage; a second current mirror coupled to the first transistor and the second transistor; and a first bias current source coupled to the first transistor and the second transistor for providing a first bias current.

With respect to claim 25, in addition to other elements in the claim, the prior art considered individual or in combination, fails to fairly show or suggest an a proportional to thermal voltage amplifier comprising: a gain controlling stage for generating a gain controlling voltage to control a voltage gain of the variable amplifier according to the first output voltage; and an amplifying stage for providing the voltage gain of the variable gain amplifier according to the gain controlling voltage; wherein the voltage gain is independent of the thermal voltage.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Prior Art***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

***Contact Information***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh Van Nguyen whose telephone number is (571) 272-1810. The examiner can normally be reached from 8:30 – 5:00 Monday-Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Rexford Barnie can be reached at (571) 272-7492. The fax phone numbers for the organization where this application or proceeding is assigned are (571-273-8300) for regular communications and (571-273-8300) for After Final communications.

2/14/06

Linh Van Nguyen

A handwritten signature in black ink, appearing to read 'Linh Van Nguyen', written in a cursive style.

Art Unit 2819